

Claims

What is claimed is:

1. A computer-based method for use in accordance with an automatic mail sorting machine, the method comprising the steps of:

5 scanning a piece of post mail in accordance with an address block locating (ABL) system for locating one or more address blocks on the piece of post mail;

analyzing the one or more located address blocks in accordance with an optical character recognition (OCR) system; and

10 providing a coupling between the ABL system and the OCR system in which one or more results associated with one of the ABL system and the OCR system can be fed as an input to the other of the ABL system and the OCR system.

2. The method of claim 1, wherein the coupling is provided such that the ABL system is restarted to scan for a further address block when no ZIP code could be extracted by the OCR system from the current address block currently being analyzed.

15 3. The method of claim 1, wherein a type of information that is evaluated for a decision to restart the ABL system is at least one of: (i) confidence of the OCR result relating to the current address block just analyzed; (ii) address block content information; (iii) confidence of the ABL result relating to the current address block just localized; (iv) data retrievable by a sort plan associated with a site of the automated sorting machine; (v) 20 postmark information retrievable from a postmark; and (vi) knowledge-based information derivable from at least one of the types of information in (i) through (v).

4. The method of claim 1, further comprising the step of providing a coupling between the ABL system and the OCR system in which the ABL system continues to scan for further potential address blocks after having found at least one potential address

block while the at least one potential address block is being processed by the OCR system.

5 5. The method of claim 4, further comprising the step of providing a ranking for each of the address blocks, being at least one of located and analyzed, for finding the most probable destination address block.

10 6. The method of claim 5, wherein a type of information that the ranking is based on is at least one of: (i) confidence of the OCR result relating to each of the address blocks; (ii) address block content information; (iii) confidence of the ABL result relating to the current address block just localized; (iv) data retrievable by a sort plan associated with a site of the automated sorting machine; (v) postmark information retrievable from a postmark; and (vi) knowledge-based information derivable from at least one of the types of information in (i) through (v).

7. The method of claim 4, wherein one or more operations associated with the ABL system and the OCR system are performed at least partly concurrently.

15 8. Apparatus for use in accordance with an automatic mail sorting machine, the apparatus comprising:

20 at least one processor operative to: (i) scan a piece of post mail in accordance with an address block locating (ABL) system for locating one or more address blocks on the piece of post mail; (ii) analyze the one or more located address blocks in accordance with an optical character recognition (OCR) system; and (iii) provide a coupling between the ABL system and the OCR system in which one or more results associated with one of the ABL system and the OCR system can be fed as an input to the other of the ABL system and the OCR system.

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9. The apparatus of claim 8, wherein the coupling is provided such that the ABL system is restarted to scan for a further address block when no ZIP code could be extracted by the OCR system from the current address block currently being analyzed.
10. The apparatus of claim 8, wherein a type of information that is evaluated for a decision to restart the ABL system is at least one of: (i) confidence of the OCR result relating to the current address block just analyzed; (ii) address block content information; (iii) confidence of the ABL result relating to the current address block just localized; (iv) data retrievable by a sort plan associated with a site of the automated sorting machine; (v) postmark information retrievable from a postmark; and (vi) knowledge-based information derivable from at least one of the types of information in (i) through (v).
15. The apparatus of claim 8, wherein the at least one processor is further operative to provide a coupling between the ABL system and the OCR system in which the ABL system continues to scan for further potential address blocks after having found at least one potential address block while the at least one potential address block is being processed by the OCR system.
20. The apparatus of claim 11, wherein the at least one processor is further operative to provide a ranking for each of the address blocks, being at least one of located and analyzed, for finding the most probable destination address block.
13. The apparatus of claim 12, wherein a type of information that the ranking is based on is at least one of: (i) confidence of the OCR result relating to each of the address blocks; (ii) address block content information; (iii) confidence of the ABL result relating to the current address block just localized; (iv) data retrievable by a sort plan associated with a site of the automated sorting machine; (v) postmark information retrievable from a

postmark; and (vi) knowledge-based information derivable from at least one of the types of information in (i) through (v).

14. The apparatus of claim 8, wherein one or more operations associated with the ABL system and the OCR system are performed at least partly concurrently.

5 15. An article of manufacture for use in accordance with an automatic mail sorting machine, comprising a machine readable medium containing one or more programs which when executed implement the steps of:

scanning a piece of post mail in accordance with an address block locating (ABL) system for locating one or more address blocks on the piece of post mail;

10 analyzing the one or more located address blocks in accordance with an optical character recognition (OCR) system; and

providing a coupling between the ABL system and the OCR system in which one or more results associated with one of the ABL system and the OCR system can be fed as an input to the other of the ABL system and the OCR system.

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